

Chapter 6

Evaluating the Risk of Declining Competition

America's economic strength has always been driven by private sector competition. When large corporations, small businesses, and entrepreneurs all must innovate to compete for market share on a level playing field, American consumers win and the economy grows stronger.

Yet even with the economic expansion becoming the longest in U.S. history, wage growth consistently meeting or exceeding 3 percent, unemployment falling to a 50-year low, and small business optimism within the top 20 percent of historical results, there is growing concern that the playing field is no longer level, harming innovation and thus the American economy. The increasing size of many of the Nation's largest companies and the growing importance of economies of scale has led some to hold the mistaken, simplistic view that "Big Is Bad." Though anticompetitive behavior by companies of any size should lead to investigations and specific enforcement actions against offenders, an across-the-board backlash against large companies simply because of their size is unwarranted. Antitrust enforcers should continue to be particularly vigilant where firms have significant market power, given the harm they can cause if they engage in anticompetitive conduct. Moreover, under U.S. antitrust law, conduct that may be procompetitive for a small firm can become problematic if undertaken by a monopolist. However, the focus must be on the conduct and not on size alone. Successful companies benefit the economy and consumers, and they are not necessarily the threat to competition and economic growth that they are sometimes perceived to be. Instead, companies that achieve scale

and large market share by innovating and providing their customers with value are a welcome result of healthy competition.

As this chapter explains, the Trump Administration understands the vital role competition plays in growing the economy, promoting new business, and serving consumers. This understanding is underpinned by a deep appreciation of economic evidence, and the best available evidence shows that there is no need to hastily rewrite the Federal Government's antitrust rules. Federal enforcement agencies, which are already empowered with a flexible legal framework, have the tools they need to promote economic dynamism; as ongoing investigations and resolved cases show, they are well equipped to handle the competition challenges posed by the changing U.S. economy.

This does not mean that the Trump Administration's work promoting competition is finished. In addition to vigorously combating anticompetitive behavior from companies, the Administration is especially focusing on government policies that distort and limit competition. As historic regulatory reform across American industries has shown, cutting government-imposed barriers to innovation leads to increased competition, strong economic growth, and a revitalized private sector.

igorous competition is essential for well-functioning markets and a dynamic economy. Therefore, the Trump Administration has championed policies that promote competition, such as reforming the tax code and removing costly and burdensome regulations. The Administration also promotes competition through sound antitrust policy, which protects consumers from anticompetitive mergers and business practices. Effective antitrust enforcement supports the Administration's deregulatory agenda by fostering self-regulating, competitive free markets. The Antitrust Division of the Department of Justice (DOJ) and the Federal Trade Commission (FTC)—collectively, the Agencies—share responsibility for enforcing the Nation's antitrust laws. This chapter evaluates antitrust policy and the Agencies' roles in light of recent trends in the U.S. economy and pressing debates about competition.

In recent years, new technologies and business models have revolutionized the relationships between firms and consumers. Some of these changes, such as rapidly improving information technology, have enabled firms to

grow. expanding their offerings from local markets to national ones, and from national markets to international ones.

These changes have exacerbated concerns about rising concentration. That is, in some parts of the economy, the largest firms appear to account for an increasing share of revenues. An influential Obama-era CEA report, "Benefits of Competition and Indicators of Market Power" (CEA 2016), argued that competition may be decreasing. This report is part of a broader debate—currently taking place in government, academia, and policy circles—about the state of competition in the economy. Proponents of the view that competition is declining (e.g., Faccio and Zingales 2018; Gutiérrez and Philippon 2019; Philippon 2019) argue that big businesses face little competition and are earning profits at the expense of consumers and suppliers. Advocates such as Furman (2018) and the Stigler Committee on Digital Platforms (2019) have called for changes to competition policy that would broaden the scope of antitrust enforcement. Others have cautioned that these proposals are not supported by the economic evidence (Syverson 2019), or that current antitrust rules are adequate to address legitimate concerns about anticompetitive behavior (Yun 2019).

Calls for changing the goals of the antitrust laws are based on empirical research that misinterprets high concentration as necessarily harmful to consumers and reflective of underenforcement. That argument was discredited long ago, when economists such as Demsetz (1973) and Bresnahan (1989) articulated the fundamental reasons why high concentration is not in and of itself an indicator of a lack of competition. The main point is that concentration may result from market features that are benign or even benefit consumers. For example, concentration may be driven by economies of scale and scope that can lower costs for consumers. Also, successful firms tend to grow, and it is important that antitrust enforcement and competition policy not be used to punish firms for their competitive success. Finally, antitrust remedies may not be required, even when firms exercise market power, because monopoly profits create incentives for new competitors to enter the market—unless substantive entry barriers or anticompetitive behavior stand in their way.

Moreover, recent empirical arguments that competition is in decline have been based on broad, cross-industry studies. The findings from these studies are both problematic and incomplete, and their implications for competition remain speculative. In contrast, the methods that the Agencies use to analyze competition are rooted in microeconomic, empirical evidence and involve detailed analyses of competitive conditions in specific industries. Any conclusions about the state of competition should be made on the basis of this type of careful research.

In addition, criticisms about the capabilities of antitrust enforcement to address novel enforcement challenges in dynamic markets fail to account for the flexibility of antitrust rules to accommodate a range of market conditions. Effective antitrust enforcement takes account of the evidence and economics appropriate to particular markets, and in turn adapts to innovation and development in the markets over time.

In short, we argue that major policy initiatives to completely rewrite antitrust rules and to create a new regulator for the digital economy are premature. In this chapter, we discuss and critique proposals for such initiatives advanced by proponents in the debate. As we explain, because these proposals are likely to impose significant costs, they should not be undertaken on the basis of current evidence.

Finally, we discuss competition policy beyond antitrust law and the Administration's efforts to combat the negative impact of overly burdensome regulation on competition. We highlight the Trump Administration's successful efforts to streamline the process by which new drugs are brought to market, particularly generic drugs. We also discuss the Agencies' efforts to advocate for the removal of unnecessary occupational licensing requirements that limit entry into professions, certificate-of-need laws that limit entry by new hospitals, and automobile franchising laws that limit the ability of car manufacturers to sell cars directly to consumers. Here, we also discuss the Agencies' work at the intersection of intellectual property law and antitrust law.

The structure of the chapter is as follows. We first provide an overview of antitrust policy and the economic analyses that the Agencies do to evaluate whether there is a need for the Federal Government to be involved to prevent anticompetitive mergers or other similar conduct. We then discuss the claims of rising concentration and the evidence on which they are based, contrasting this to the type of analysis that the Agencies do. Next, we discuss the proposals for regulation, with a focus on the digital economy. In the last section, we discuss the Trump Administration's policies to spur competition outside the context of antitrust rules.

The Origin and Principles of Antitrust Policy

The Agencies follow the guiding principle that the role of antitrust law is to protect the competitive environment and the process of competition. The Agencies use their given authority for robust enforcement of antitrust law to prevent anticompetitive behavior by firms. They also seek to avoid undue interference by the Federal Government in the competitive process.

The main antitrust statutes are the Sherman Antitrust Act of 1890, the Clayton Act of 1914, and the Federal Trade Commission Act of 1914. Together, these laws address three categories of conduct: mergers, monopolization, and anticompetitive agreements. First, under the Clayton Act, both Agencies challenge mergers that have a reasonable likelihood of reducing competition. They also challenge acts of monopolization under Section 2 of the Sherman Act or the equivalent provision of the Federal Trade Commission Act. Finally, both Agencies challenge agreements among separate economic actors that place

unreasonable restraints on trade under Section 1 of the Sherman Act or the Federal Trade Commission Act (FTC 2019d).

Certain types of conduct, such as collusion among competitors to fix prices or rig bids, are considered so harmful to competition that they are categorized as criminal violations of the Sherman Act. The DOJ has long prioritized criminal enforcement of the antitrust laws, and violations carry significant financial fines and, for culpable individuals, jail time.

For noncriminal conduct, whether for mergers or monopolization, a central challenge facing the Agencies is determining when conduct is procompetitive and when it is anticompetitive. It can be difficult to distinguish between the two, and optimal enforcement is often a balancing act. The Agencies and the Courts want to avoid mistakenly prohibiting conduct that is procompetitive, and they also want to avoid allowing conduct that is anticompetitive.

To understand these challenges, consider a merger between direct competitors (i.e., a horizontal merger). The reduction in competition could encourage the merged firm—and also, perhaps, its competitors—to raise prices. If higher prices or other competitive types of harm to consumers are the likely outcome of a merger, then the Agencies may file a lawsuit to seek to block the transaction. Conversely, a merger, even one between close competitors, can enhance competition by creating a stronger competitor. Mergers often allow firms to combine complementary assets to realize a variety of efficiencies. For example, they may realize cost reductions, improve the quality of their products, or develop new products. Cost reductions, in particular, create an incentive to reduce prices that can offset or even reverse any incentives to raise prices. As a result, horizontal mergers may in some cases lead to lower prices, not higher ones. As we discuss in the next section, when the Agencies review mergers, they conduct a detailed economic analysis to assess these complex issues.

Most mergers do not raise competition issues. For example, the merging firms may not operate in the same or even related markets. Antitrust concerns are usually greatest when the merging parties are direct competitors. In rarer cases, antitrust concerns can arise when the merging firms are vertically related, such as when one firm sells inputs to the other. This was the case in the DOJ's challenge of the merger between AT&T and Time Warner, as is discussed by Gee, Peters, and Wilder (2019).

When mergers are large enough, the merging parties must notify the Agencies in advance of merging. In 2018, the most recent year for which data are available, the Agencies received notice of 2,028 mergers that were potentially subject to review (DOJ and FTC 2019a). Most deals were allowed to proceed after an initial review that takes place within 30 days of the notification. In 45 matters, the reviewing agency identified competition issues and sought additional discovery from the parties to allow an in-depth investigation, in what is referred to as a "Second Request." As figure 6-1 shows, the number

Figure 6-1. Summary of Transactions by Fiscal Year, 2009-18



of second requests conducted by the Agencies has remained relatively stable over time.

Source: Federal Trade Commission and Department of Justice (2019a).

Economic Analysis at the Agencies

To aid in distinguishing between procompetitive and anticompetitive conduct, the Agencies employ Ph.D. economists who specialize in the analysis of competition. The Agencies also hire outside economic experts to examine evidence in particular cases. Here, we provide an overview of how economic analysis is used in merger enforcement. Similar methods are used in other areas of antitrust enforcement.

The central question in any merger review is whether the merger may substantially lessen competition. As explained in the "Horizontal Merger Guidelines" (DOJ and FTC 2010), this means that one or more firms affected by the merger are reasonably likely to raise prices, reduce output, decrease quality, reduce consumer choice, diminish innovation, or otherwise harm consumers. This is sometimes referred to as a consumer welfare standard, because the focus is on economic harm to consumers. Usually, this means harm to downstream customers of the merging firms, but the Agencies may also evaluate harm to upstream suppliers if there is a concern that the merger will enhance monopsony power, leading to lower prices or other types of economic harm for the suppliers deprived of competition for the sale of their goods or services; see box 6-1. Importantly for the digital age, the consumer welfare

Box 6-1. Antitrust and Monopsony: George's Foods and Tyson Foods

Although most merger reviews focus on types of harm to downstream consumers, the Agencies may also investigate antitrust concerns relating to monopsony. In 2011, the DOJ challenged George's Foods' acquisition of a chicken-processing complex in Harrisonburg, Virginia, that was owned by Tyson Foods. Both companies provide chicken-processing services for birds that are raised by the surrounding area's farmers. The processors own the birds, provide the chicks and feed, and transport the birds between the farm and processing plants. The farmers ("growers") work under contract with the processors, providing chicken houses, equipment, and labor for raising the chickens.

Before the merger, George's Foods and Tyson Foods competed directly with each other for purchasing the services of growers in the Shenandoah Valley. The merger reduced the number of competitors from three to two, leaving George's Foods with about 40 percent of local processing capacity. The DOJ raised concerns that the merger would allow George's Foods to decrease prices or degrade contract terms to growers in the region. The other competing processor lacked the capacity to take on significant numbers of growers if George's were to depress prices. To remedy these concerns, George's agreed to invest in improvements in Tyson's chicken processing facilities, giving it an incentive to operate at a greater scale than before the merger. With an increased demand for chickens, George's also had an increased demand for the local growers (DOJ 2011a, 2011b).

standard considers harm beyond price effects, including harm to innovation, quality, and choice. The consumer welfare standard is also different from a total welfare standard, which would focus on overall efficiency, or outcomes that maximize the joint surplus of consumers and firms.¹

To evaluate the likelihood of consumer harm, the Agencies analyze a variety of evidence. They may seek documents, testimony, and data from the merging parties. They may also seek information from other affected parties including customers, suppliers, and rival firms.

An important part of the analysis is to determine the nature of competition. Competition takes a variety of forms, and the effect of a merger depends on how competition works in the affected markets. For example, firms set prices in a variety of ways. They may be posted, as is common in the retail sector, or they may be negotiated, as is common in business-to-business services. In some cases, negotiations between buyers and sellers are structured with a formal auction process. These and other differences shape the nature of competition. In some markets, competition is so fierce that two competing firms

¹ Wilson (2019) has a discussion of the pros and cons of alternative antitrust standards.

are enough to drive prices down to the marginal cost. In other markets, many firms can profitably set prices significantly above the marginal cost.

The strength of competition between any firms depends on the extent to which consumers view their products as substitutes. Firms often sell differentiated products. This means that their products are similar, but not identical, and consumers may have strong (or weak) preferences between them. An important part of the economic analysis is assessing how close the merging firms' products are to each other in the view of consumers. Concerns about a lessening of competition will usually be greatest if many consumers view the firms' products as each other's closest substitutes. For example, some brands of breakfast cereal are so different in flavor, nutrition, and other attributes that few consumers regard them as substitutes, and competition between them is weak. Other brands of breakfast cereal probably compete head-to-head. To assess the closeness of products, economists at the Agencies review evidence such as win/loss reports, discount approval processes, customer switching patterns, and consumer surveys.

Based on such evidence, the Agencies identify relevant markets where competition is likely to be harmed. This analysis is based on demand substitution, or how consumers would respond to the increase in the price of a product. For example, if the evidence were to show that few people would switch to eating sugary breakfast cereals if the price of "heart-healthy" breakfast cereals were to rise, the Agencies might define a market for "heart-healthy" breakfast cereals that excludes the sugary alternatives. How broadly or narrowly to define markets can be a source of contention, as the shares of the merging firms will appear lower in broader markets. If markets are defined too broadly, they will contain products that do not significantly constrain the prices of the merging firms. The lower shares of the merging firms may then wrongly suggest that there is more competition than actually exists.

The Agencies also identify the relevant geography for a market. Markets may have a limited geography based either on consumers' preferences or on sellers' ability to serve them. For example, for most people, restaurants in Los Angeles and New York are probably not close substitutes. Nor would a flight from Los Angeles to New York be a good substitute for a flight from New York to Washington. In mergers of airlines, the DOJ often defines markets consisting of origin and destination pairs. A relevant market might include nonstop flights from San Francisco to Los Angeles if the merging parties both offer such flights.

The Agencies use a methodological tool, known as the hypothetical monopolist test, to delineate relevant markets. The test imagines that a single profit-maximizing firm monopolizes the candidate market and then analyzes whether the monopolist would "impose at least a small but significant and non-transitory increase in price" (DOJ and FTC 2010, 9). The Agencies usually define markets to be the smallest ones that satisfy the test. When a market is

defined this way, products in the market significantly constrain each other's prices, but products outside the market do not.

After defining a relevant market, the Agencies calculate shares for all firms in the market and assess the level of concentration. Markets are classified as unconcentrated, moderately concentrated, or highly concentrated, based on thresholds of the HHI; see box 6-2. Markets with HHIs above 2,500 are considered highly concentrated. In such markets, the Agencies presume that mergers that increase the HHI by more than 200 points are likely to be anticompetitive. However, the merging parties can rebut this presumption with persuasive evidence.

To illustrate the role of market definition, consider the recent merger of the Walt Disney Company and Twentieth-Century Fox. The DOJ was concerned about competition between ESPN, which was owned by Disney, and the Fox Regional Sports networks. A key question was how much competition these cable sports networks faced from the sports programming shown on the major broadcast networks. The DOJ alleged that the licensing of cable sports programming to multichannel video programming distributors, such as Comcast and FIOS, was a relevant market, and one in which the merging parties had high shares. In excluding broadcast programming from the market, the DOJ alleged that the broadcast networks did not provide sufficiently close competition to prevent competitive harm. As stated in the complaint, multichannel video programming distributors do not typically consider broadcast network programming as a replacement for cable sports programming because broadcast networks offer limited airtime to sports programming and are focused on marquee events with broad appeal. The DOJ approved the merger only after the parties agreed to divest Fox's interests in its regional sports networks (DOJ 2018a, 2018b).

The inquiry into market share is a starting point for economic analysis, but the ultimate goal is to assess whether the merger is likely to have adverse competitive effects. A merger may harm competition because there are fewer competitors competing (unilateral effects), or it could harm competition by encouraging explicit or tacit coordination between rivals (coordinated effects). As noted above, mergers may harm competition in prices, or they may harm competition in nonprice dimensions, such as quality or innovation.

To evaluate competitive effects, the Agencies use a variety of evidence. Market shares are one type of evidence, but other evidence is also considered. For example, the Agencies may analyze how a recent merger in the same market affected competition. Or, if the merging firms compete in some local markets, but not others, the Agencies may compare prices across regions where the firms do and do not compete. In markets with differentiated products, such as breakfast cereal, the Agencies may estimate diversion ratios. A diversion ratio is a measure of how closely two products compete. For a first product sold by one of the merging firms and a second product sold by the other merging

Box 6-2. Measuring Concentration and the HHI

Concentration is a measure of the number and size of firms competing in a market. When markets are delineated around competition, concentration can be a useful reflection of competitive conditions. In highly concentrated markets—those markets with a small number of large firms—mergers between large firms are relatively likely to enhance market power, leading the merged firm to raise prices, reduce quality, reduce innovation, or otherwise harm consumers.

The Agencies usually measure concentration in terms of a firm's share of market revenues, but concentration can be defined around other measures, such as unit sales. The Agencies use the measure that best reflects the competitive significance of firms in the market. For example, if physical capacity limits the ability of firms to expand their production, market shares may be measured in terms of physical capacity. A firm that is poised to enter a market, but is not yet selling anything, may be assigned a market share based on projected revenues.

The Agencies measure concentration using the Herfindahl-Hirschman Index (HHI), which is calculated as the sum of the squares of the individual firms' market shares in a relevant market. In a monopolized market with only one firm, the firm's share is 100 percent, and the HHI is 100^2, or 10,000. In a market with 100 firms each with 1 percent share, the HHI is much lower, at 100. A higher HHI corresponds to a more concentrated market. A merger between two firms combines their shares, so the HHI increases. For example, if a market has four equal-sized firms and two of the firms merge, the HHI increases from 2,500 to 3,750.

firm, the diversion ratio is the percentage of sales that the first product would lose to the second product, if the price of the first product increases. The higher the diversion ratio, the closer the competition. The Agencies sometimes use diversion ratios in the context of economic models that simulate how firms would change their prices after a merger. The Agencies also consider whether efficiencies or entry are likely to offset or reverse adverse competitive effects.

The analysis of competitive effects has become more important over time. As discussed by Shapiro (2010), the Agencies revised the Horizontal Merger Guidelines in 1982 to downplay the emphasis on market shares and to increase the emphasis on competitive effects.² With this change in emphasis, antitrust enforcement also became less interventionist. Shapiro (2010) observes that the 1968 Horizontal Merger Guidelines stated that the Agencies "ordinarily challenge" mergers between an acquiring firm with at least 15 percent market share and an acquired firm with at least 1 percent market share.

 $^{^2}$ Shapiro (2010, 51–52). See also Lamoreaux (2019); Berry, Gaynor, and Morton (2019); and Peltzman (2014).

Mergers of this sort would be unlikely to be challenged today, because the analysis of competitive effects is rarely supportive of antitrust enforcement in such cases

However, many people argue that the Agencies intervene too rarely in the modern era. Opponents of this view argue that antitrust overenforcement is more harmful than antitrust underenforcement. This is because if markets become overly concentrated to the point that profits are excessive, new firms are likely to enter to take up the slack. Proponents of more aggressive enforcement argue that new firm entry is often not guaranteed. In markets where entry is difficult (i.e., there are high barriers to entry), established firms may reap excessive profits for long periods of time (Baker 2015). In the next section, we turn to this debate

A Renewed Interest in Concentration and the State of Competition

Some observers of the U.S. economy have raised concerns that it is becoming less competitive. As noted above, in 2016, an influential CEA policy brief (CEA 2016) argued that competition may be decreasing in many sectors, and President Obama issued an executive order directing Federal Government agencies to promote competition (White House 2016). Similar diagnoses and calls to regulatory action have been sounded by pundits and economists alike.³

In this section, we first discuss problems with the evidence presented in the 2016 CEA report, and then we explain how similar issues are manifested in other research on this topic. We explain why drawing inferences about the state of competition or antitrust enforcement from this weak evidence is problematic. Finally, we discuss alternative approaches to assessing if there is in fact a competition problem in the United States.

Problems with the CEA's 2016 Report

A central argument made in the 2016 CEA report, "Benefits of Competition and Indicators of Market Power," is that the rising market shares of the largest firms in many industries constitute evidence of declining competition. This argument is flawed both in terms of the evidence on market shares and the inference about competition.

Table 6-1, which is taken from the 2016 CEA report, examines trends in the revenue share of the 50 largest firms-known as the CR50-in different industry segments. For background, the U.S. Census Bureau classifies firms using the North American Industry Classification System (NAICS), which divides the entire economy into 24 sectors classified with two-digit numerical codes, or

³ Examples include Furman (2018); Grullon, Larkin, and Michaely (2019); Krugman (2016); Kwoka (2015); Lamoreoux (2019); Wessel (2018); Wu (2018); and the Economist (2016).

Table 6-1. Change in Market Concentration by Sector, 1997-2012

Industry	Revenue earned by 50 largest firms in 2012 (dollars, billions)	Revenue share earned by 50 largest firms in 2012 (percent)	Change in revenue share earned by 50 largest firms from 1997 to 2012 (percentage points)
Transportation and warehousing	307.9	42.1	11.4
Retail trade	1555.8	36.9	11.2
Finance and insurance	1762.7	48.5	9.9
Wholesale trade	2183.1	27.6	7.3
Real estate rental and leasing	121.6	24.9	5.4
Utilities	367.7	69.1	4.6
Educational services	12.1	22.7	3.1
Professional, scientific, and technical services	278.2	18.8	2.6
Administrative and support	159.2	23.7	1.6
Accommodation and food services	149.8	21.2	0.1
Other services	46.7	10.9	-1.9
Arts, entertainment and recreation	39.5	19.6	-2.2
Healthcare and assistance	350.2	17.2	-1.6

Source: Census Bureau.

Note: Data represent all North American Industry Classification System sectors for which data were available from 1997 to 2012

two-digit sectors. These sectors are further divided into three-, four-, five-, and six-digit subsectors. The CEA (2016) and Furman (2018) examine concentration in 13 of the two-digit NAICS sectors. Table 6-1 shows that 10 sectors became concentrated by this measure over the 15-year period from 1997 to 2012.

A key problem with table 6-1 is that the two-digit sectors are aggregations of overly broad geographic and product markets that shed little light on the state of competition. For example, retail trade includes all grocery stores, hardware stores, and gasoline stations, among many others, across the Nation. But grocery stores in Florida and Wisconsin do not compete for the same customers, and hardware stores and gas stations, even those in the same local area, largely sell products that are unrelated in demand. Concentration measures defined by national segments also miss the dimension of local competition. Rossi-Hansberg, Sarte, and Trachter (2019) find that the expansion of national firms into local markets has been a factor both in increasing concentration at the national level *and* in decreasing concentration at the local level.

This approach contrasts with how the Agencies define relevant markets for antitrust analysis. As discussed above, the Agencies, and antitrust economists more generally, analyze data on demand that reveal the extent to which consumers regard products as substitutes. In this way, markets are defined to include products that are in competition with each other in the local product markets where they compete. Even the finest six-digit NAICS sectors are far broader than typical antitrust markets. Werden and Froeb (2018) calculate the volume of commerce of the relevant markets alleged in DOJ merger complaints

between 2013 and 2015 as a share of industry shipments in the six-digit NAICS sector. They find that in most cases, the antitrust markets accounted for less than 0.5 percent of the six-digit NAICS sector. In many cases, this is because the antitrust markets where the DOJ identified a competition problem involved single localities such as a city, State, or region, whereas the NAICS sectors are national. Although studies of broad swaths of the economy, such as the 2016 CEA report, are necessarily limited by the data that are publicly available, the coarseness of the data limits what they can say about competition.

A second problem with table 6-1 is the use of the CR50. The Agencies and other economists often find evidence of robust competition in markets with only a few firms engaged in head-to-head competition. Either the HHI (discussed above) or a four-firm concentration ratio (known as the CR4) would be more appropriate for a competition study. Note that in table 6-1, the CR50 are also usually much less than 100, meaning that there are more than 50 firms operating in the segment.

Because of the overly broad market definition and the use of the CR50, the data presented in table 6-1 tell us nothing about competition in specific markets, let alone across the entire economy. Carl Shapiro, a former CEA member and Deputy Assistant Attorney General for Economics under the Obama Administration, concluded that table 6-1 "is not informative regarding overall trends in concentration in well-defined relevant markets that are used by antitrust economists to assess market power, much less trends in competition in the U.S. economy" (Shapiro 2018, 722).

Problems with Related Research

The CEA's 2016 report, "Benefits of Competition and Indicators of Market Power," is part of a larger body of recent research arguing that competition may be in decline. Much of this literature tries to infer the state of competition from correlations between flawed concentration measures, such as those presented in table 6-1, and market outcomes, such as prices, profits, and markups. This methodology rests on a problematic assumption that increases in concentration create conditions of softer competition. That is, if undesirable outcomes—such as higher prices, profits, and markups—are correlated with concentration, then the cause of these outcomes is assumed to be weaker competition. Recent papers in this vein include the 2016 CEA report; and those by Furman (2018); Furman and Orszag (2018); Gutiérrez and Philippon (2017a, 2017b); and Grullon, Larkin, and Michaely (2019).

Problems with this assumption have been understood since at least the 1970s (Demsetz 1973; Bresnahan 1989). The most fundamental problem is that there are alternative explanations for why a market might demonstrate both high concentration and high markups that are consistent with

⁴ For a recent, in-depth discussion, see Berry, Gaynor, and Morton (2019); and Syverson (2019).

procompetitive behavior by firms. These include fixed costs, scale economies, and globalization.

To see that this is true, consider the issue of fixed costs. In many markets, firms make upfront investments in assets such as physical plant, equipment, research and product development, and information technology. Firms will make these investments only if they anticipate earning sufficient profit margins to recoup them. In terms of basic economics, if a firm has substantial fixed costs, then its average cost may be substantially higher than its marginal cost. A firm may earn a profit close to zero when fixed costs are accounted for, but still maintain a positive margin between price and marginal cost. The Agencies do not regard this as inherently problematic. As the Horizontal Merger Guidelines state, "High margins commonly arise for products that are significantly differentiated. Products involving substantial fixed costs typically will be developed only if suppliers expect there to be enough differentiation to support margins sufficient to cover those fixed costs. High margins can be consistent with incumbent [established] firms earning competitive returns" (DOJ and FTC 2010, 4); see box 6-3.

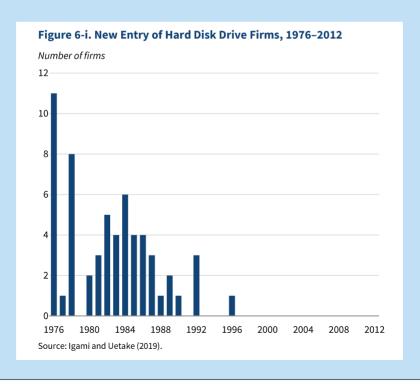
Even if high concentration and high markups are not inherently problematic, what about rising concentration and rising markups? This depends on why the markups and concentration are rising. Suppose that fixed costs are rising. If they are rising for anticompetitive reasons, such as if new and unnecessary government regulations are raising the cost of entry, then the trend may be associated with higher prices and consumer harm. But fixed costs could also be rising because firms are making increasingly expensive investments to become more competitive. Information technology in particular can involve upfront investments in business systems that help to reduce a firm's marginal cost of production or improve product quality. A firm that makes such investments may outcompete less efficient firms and grow its market share. Through such a process, information technology could transform a market to one with fewer, more efficient firms. Because the surviving firms have lower marginal costs, their prices may fall even as their markups rise. This scenario is procompetitive because consumers derive benefits from the lower prices or improved quality.

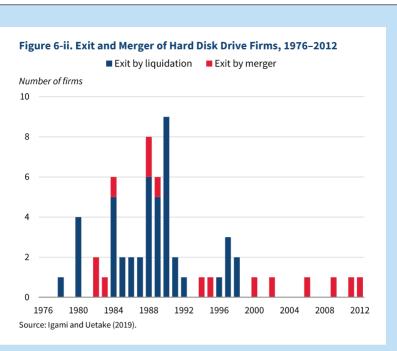
Berry, Gaynor, and Morton (2019) review recent research, providing evidence that investments in intangible assets such as software and business processes are becoming more important. Crouzet and Eberly (2019), in particular, find a positive correlation between firms' market shares (in broad industry segments) and their investments in intangible assets. In the view of Berry, Gaynor, and Morton (2019), the broad category of "increasing investments in fixed and sunk costs" may be the most important source of rising global markups. Autor and others (2019) find evidence that increases in concentration reflect a reallocation of output toward large, productive firms. They argue that this could be the result of globalization and technological change, and further observe that their explanation for rising concentration has "starkly different

Box 6-3. Concentration, Innovation, and Competition

Industries that rely on innovation often provide dramatic examples of high fixed costs. Consistent with this situation, concentration is often high. The relationship between concentration, competition, efficiency, and consumer welfare is complex. Competition can spur firms to innovate, but it can also weaken their incentives to innovate by making it difficult for them to recoup their investments. In research spanning decades, economists have found that different models give different answers about whether higher concentration increases or decreases innovation, and results about the optimal level of concentration are often sensitive to market conditions (Marshall and Parra 2019).

To illustrate, Igami and Uetake (2019) study these trade-offs in the hard disk drive industry. As shown in figures 6-i and 6-ii, the period had waves of entry and exit as the industry matured and consolidated. Innovation was of central importance, as the industry followed Kryder's law, that the storage capacity of hard disk drives doubles roughly every 12 months. After estimating a model of dynamic oligopoly, Igami and Uetake (2019) simulate the effect of alternative merger policies on expected social welfare. They conclude that a policy to block mergers if there are three or fewer firms would have found "approximately the right balance between pro-competitive effects and valuedestruction side effects." Although such a policy might not be optimal in





other industries or for any particular merger, this study helps to illustrate why competition can be robust in markets with relatively few firms.

The proposed acquisition of Baker Hughes by Halliburton provides an example of when innovation was central to a merger review (DOJ 2016). Halliburton, Baker-Hughes, and Schlumberger were the three leading firms in the oilfield services industry, providing sophisticated drilling technology and related services for drilling oil wells. Each invested hundreds of millions of dollars annually in research and development; for products where innovation was most important, there were few other competitors. The DOJ sued to block Halliburton's proposed acquisition of Baker-Hughes, delineating 23 relevant products and services where the proposed merger would result in markets dominated by the merged firm and Schlumberger. The DOJ was not satisfied that Halliburton's proposed divestitures would remedy the potential harm, and the parties ultimately abandoned their plans (Chugh et al. 2016).

implications" for welfare than explanations based on weakened competition or antitrust enforcement. That is, if rising concentration and markups are driven by conduct that benefits consumers, such as can be the case for investments in intangible assets, then there may be no competition problem and no antitrust implications.

In addition to the fundamental error of equating concentration with a lack of competition, there are also other problems with the recent literature on

concentration. Similar to the CEA's 2016 report, these studies' use of Census and other macroeconomic data limits them to examining concentration in NAICS industry segments that are too broad to shed light on competitive conditions in properly defined antitrust markets. Many of the studies use data for three-digit or four-digit NAICS segments (e.g., Gutiérrez and Philippon 2017a, 2017b, 2019; Grullon, Larkin, and Michaely 2019); but as discussed above, even the finest six-digit NAICS segments are far broader than antitrust markets.

Another problem is that many of the studies explore links between concentration and financial measures, such as markups and profits, that are difficult to measure—especially across broad industry segments. Price-cost markups, in particular, are a basic measure of market power, but firm-level data on markups are rarely available. Accounting data are sometimes informative about the markup of price over average variable cost, but they do not accurately measure the economic profit margins that are relevant to economic analysis. Basu (2019) reviews different approaches to estimating markups used in the recent research discussed above. He discusses problems with the methods, including that most of the estimates of markups are implausibly large.

Connecting Concentration and Markups with Antitrust Law

The assessment of the competitive health of the economy should be based on studies of properly defined markets, together with conceptual and empirical methods and data that are sufficient to distinguish between alternative explanations for rising concentration and markups. This continues to be the approach of the Agencies.

In line with this, Berry, Gaynor, and Morton (2019, 63) call for a wave of "industry-level econometric studies . . . to help us understand shifts in markups, the underlying causes, and more broadly how markets in our modern economy are functioning and evolving." In their view, regressions of market outcomes on measures of concentration should carry little weight in policy debates because they do not and cannot illuminate causal relationships. Syverson (2019) is more optimistic that economy-wide studies can be helpful to identify patterns of increasing concentration for further research, but he concludes that the evidence does not yet support conclusions that rising aggregate market power exists and is causing problematic trends in the economy. Like Berry, Gaynor, and Morton (2019), Syverson (2019) calls for more careful research.

The airline industry provides an example where detailed, publicly available data have enabled insightful research. Werden and Froeb (2018) review this literature to conclude that since deregulation in the late 1970s, studies have not found systematic increases in concentration at the route level. Berry, Carnall, and Spiller (2006) note that investments in hub-and-spokes networks enabled airlines to earn high markups, but also benefited consumers. Moreover, Berry, Gaynor, and Morton (2019) cite Borenstein (2011) to observe that for many years, the large fixed costs associated with hub-and-spokes networks were just offset by high markups, leaving the major airlines with near-zero profits.

Other useful studies focus on how consummated mergers have affected market outcomes. In these studies, the increase in concentration is explicitly caused by a merging of competitors, so there is no question about why concentration has increased. For example, Ashenfelter, Hosken, and Weinberg (2015) study the 2008 joint venture between the beer giants Miller and Coors. The DOJ approved the deal, in part because it was expected to significantly reduce the costs of shipping and distribution (Heyer, Shapiro, and Wilder, 2009). Ashenfelter, Hosken, and Weinberg (2015) find little effect on prices, because the efficiencies created by the merger nearly exactly offset the realized price increases in the average market. However, in an analysis of the same market, Miller and Weinberg (2017) find evidence that the joint venture may have facilitated price coordination between competitors. These conflicting results illustrate some of the important nuances related to competition that broad industry studies cannot assess.

At this point, the evidence that the United States has a broad competition problem is inconclusive. However, the CEA's 2016 report and the related literature discussed above have spurred debate in government, academia, and policy circles about ways to strengthen antitrust enforcement to deal with the perceived competition problem. We now turn to this debate.

Calls for a Broader Interpretation of Antitrust Policy

The 2016 CEA report, "Benefits of Competition and Indicators of Market Power," and the related literature discussed above are part of a broader movement that is concerned with the growth of large firms across the U.S. economy. Lamoreaux (2019) provides a useful overview. Some of these observers want to amend or rewrite the antitrust laws to expand the Federal Government's involvement beyond its traditional scope to consider outcomes unrelated to market competition, including the political influence of large corporations, control of advertising and news media, and rising income inequality. For example, Furman and Orszag (2018) raise the question of whether a rising share of firms earning "supernormal returns on capital" might increase wage inequality due to workers at these firms sharing in the supernormal returns. Also, as we discuss in the next section, some observers are calling for regulations specifically for the digital economy.

Other observers are focused on traditional antitrust law, but would like enforcement to be expanded by lowering the threshold for an act to be considered anticompetitive. For example, one Senate bill would change the language of the Clayton Act, which prohibits mergers where the effect "may be substantially to lessen competition." The bill would change the standard of

"substantially" to a standard of "materially." This would mean that the Federal Government could block a merger that has a smaller effect on competition (U.S. Congress 2019a).

As we have discussed, the argument that the U.S. economy is suffering from insufficient competition is built on a weak empirical foundation and questionable assumptions. Antitrust law has evolved through careful development of its case law, based on the legal system's accumulated experience with enforcement actions and the effects of specific types of acts on industries characterized by specific competitive dynamics. Throughout its development, antitrust law has consistently proven flexible to the evolving market conditions presented by new industries and business models in the ever-changing American economy. Before making radical changes to the law, the case for such change should be better grounded.

Moreover, the antitrust laws are a poor tool for addressing issues that go beyond questions of anticompetitive market conduct. Using antitrust law to regulate markets in the absence of competition problems will exact costs on the economy by preventing efficient market organization. If society wants to pursue goals such as rising income inequality or the political power of large firms, there are better policy tools to deal with these issues (Shapiro 2018).

We next turn to the related debate about whether more expansive antitrust enforcement is needed for the digital economy.

Antitrust Enforcement for the Digital Economy

In this section, we focus on the rapidly evolving issue of antitrust enforcement and competition in the digital economy. In recent years, digital platforms have come under increasing scrutiny. In the United Kingdom, the government commissioned an expert panel to review competition policy for the digital economy (Digital Competition Expert Panel 2019c). Since the panel made its recommendations, the U.K. has been working to create its Digital Markets Unit. The European Union has also commissioned an expert report (Crémer, Montjoye, and Schweitzer 2019), and has introduced several regulations for digital platforms.⁵

In the United States, the FTC has conducted hearings to examine whether new technologies and business practices, including those associated with digital platforms, require adjustments to competition policy (FTC 2019b). The House and Senate Judiciary Committees have also held hearings related to competition policy for digital platforms (U.S. House 2019a, 2019b, 2019c; U.S.

⁵ The U.K. Digital Markets Unit would develop and enforce regulations related to data interoperability, data mobility, and data openness. It would have the authority to designate certain platforms as having "strategic market status." Such platforms would be subject to stronger regulations. In July 2019, the European Union issued new regulations governing how platforms interact with businesses (European Commission 2019). Rules on data portability and privacy, known as the General Data Protection Regulation (GDPR), went into effect in 2018.

Senate 2019). Independently, the Stigler Center at the University of Chicago has organized a committee on digital platforms that has developed recommendations for stronger antitrust enforcement and a digital regulator (Stigler Committee on Digital Platforms 2019). The Agencies have also opened reviews into market-leading online platforms, focusing on antitrust and related issues (Bloomberg 2019; DOJ 2019).

Although this chapter focuses on competition concerns, we note that some of these reviews also consider whether consumer protection regulations are warranted for issues such as data privacy and the moderation of media content.

Background

Digital platforms are intermediaries that enable interactions between users. They include search engines, online market places, social networks, communication and media platforms, and home-sharing and ride-sharing services, among other examples. Many of these platforms have been enormously successful and have reshaped the economy over the last 20 years.

Some concerns about digital platforms rest on the idea that they often operate in markets with economic features that naturally tend toward high concentration. One such feature is network effects, which arise when consumers place more value in a platform because many other people use it. For example, the more people one can reach with a messaging service, the more valuable that service is to users. When network effects are important, the largest platforms enjoy an advantage over their rivals simply because they have more users, regardless of the quality of their services. In some cases, the advantage may be so great that other firms are unable to compete. For example, in the videocassette recording industry, the Betamax technology essentially disappeared after VHS technology pulled ahead (Werden 2001).

In markets with network effects or other types of economies of scale, firms may compete for the entire market, rather than for shares in the market. The resulting monopolies may not be permanent. Bourne (2019) gives many examples of firms that achieved dominance through network effects or production economies of scale, only to eventually lose out to competition from innovative rivals. His examples range from the Great Atlantic & Pacific Tea Company in the 1920s to MySpace and Nokia in the early part of this century.

One of the current debates is about the extent to which digital platform industries are characterized by high barriers to entry. A barrier to entry is an obstacle that puts new firms at a disadvantage relative to firms already in the market.⁶ Network effects can be a barrier to entry, particularly if an entrant must simultaneously attract two groups of users. For example, in the payments

⁶ The formal definition of a barrier to entry has a long history of debate among economists. For a discussion, see Werden (2001).

industry, a new payment system might need to sign up thousands of merchants before consumers see it as valuable, and vice versa. However, network effects are not always sufficient to deter entry. If an entrant has an offsetting advantage, it may be able to overcome the advantage enjoyed by the established platform. For example, when Microsoft introduced the Xbox platform for video gaming, it was able to overcome the network effects enjoyed by the Sony PlayStation 2 by focusing on a few blockbuster games (Lee 2013).

There is also a debate about the extent to which access to data can be a barrier to entry. Mahnke (2015) discusses the issue in the context of the DOJ's 2008 investigation of the merger of the media firms Thomson and Reuters. The DOJ alleged that the merger would lead to higher prices for data sets related to company fundamentals, earnings, and aftermarket research, and that entrants would not be able to replicate the high quality of these data sets. The DOJ approved the merger, but only after the parties agreed to divest copies of the data sets along with supporting assets (DOJ 2008).

Data can also be a barrier to entry in the digital economy. Because dominant platforms have more users, they often have access to much more data than new entrants, and this can give them an insurmountable advantage (Rubinfeld and Gal 2017). For example, dominant platforms may be better able to target advertising at their users and so earn more revenues from advertising. However, a lack of access to data does not always deter entry. Lambrecht and Tucker (2015) observe that Airbnb, Uber, and Tinder entered markets where established firms (e.g., Expedia) had better data. They were able to succeed because of their innovative products. Lambrecht and Tucker (2015) also observe that data are nonrivalrous, in the sense that data can be shared and consumed by many users, in contrast to rivalrous goods such as food, which are consumed only once. Because of this, entrants can sometimes buy data as a substitute for collecting them internally from their users. However, this is not always the case, and the role of data as a barrier to entry depends on the facts and context of each market.

Finally, another debate asks whether dominant platforms are harming competition by buying too many smaller firms, such as start-ups funded with venture capital. It is common for large platforms to acquire smaller firms. The digital economy relies heavily on innovation, and being acquired by an established firm can be an important exit path for initial investors. Acquisition can also be important for a start-up's success. The acquiring firm may bring marketing, financing, and other business assets that enable the start-up to grow. However, if a start-up is not acquired, it might instead grow into an independent, full-fledged competitor. Some acquisitions may occur precisely to prevent such competition, as Cunningham, Ederer, and Ma (2019) find to be the case in the pharmaceutical industry. However, as we discuss further below, it can be challenging for the Agencies to assess whether acquisitions of nascent competitors are procompetitive or anticompetitive in light of the benefits associated with them.

In summary, many digital platform markets have demand and supply features, suggesting that high concentration is efficient. The concentration has led to concerns about market dominance, anticompetitive behavior, and a lack of competition. But concentration can also be efficient, and there may be robust competition for the market, even in the face of high concentration.

Proposals for Intervention

Advocates of stronger regulation for digital platforms recommend a range of measures encompassing both antitrust reform and regulation—see, for example, the Stigler Committee on Digital Platforms (2019); the Digital Competition Expert Panel (2019c); and Crémer, Montjoye, and Schweitzer (2019). Here, we consider proposals related to data portability and interoperability, acquisitions of nascent competitors, and the creation of a digital regulatory authority.

Data portability and interoperability. Proposals to increase data portability and interoperability involve new regulations and legislation. Portability regulations would require digital platforms to enable customers to access their data from different platforms on request. Interoperability legislation would require digital platforms to enable their customers to switch their data from one platform to another. For example, a bill recently proposed in the Senate would require large communication platforms that generate income from their users' data to enable data portability and interoperability with other communication platforms. The goal is to reduce entry barriers for competitors to these platforms by making it less costly for customers to switch from one platform to another, and also by allowing customers of dominant platforms to communicate easily with customers of rival platforms (U.S. Congress 2019b).

As with any regulation, however, this would impose costs on the regulated platforms. Jia, Jin, and Wagman (2019) study the effect of the recent rollout of rules on data privacy and portability in Europe, known as the General Data Protection Regulation (GDPR), on venture capital funding. They find negative effects on European firms relative to their U.S. counterparts in terms of total funding, the number of deals and the amount raised per deal, with more pronounced effects for newer and data-related firms.

Acquisitions of nascent competitors. As discussed above, proponents of stronger antitrust enforcement raise concerns that dominant platforms are protecting themselves by acquiring small firms that would otherwise develop

⁷ In a study of the pharmaceutical industry, Cunningham, Ederer, and Ma (2019) conclude that about 6 percent of acquisitions in their sample were "killer acquisitions" that forestalled the development of new drugs that would otherwise have competed with the acquirer's existing products.

into future competitors. Antitrust law has an existing framework to challenge such mergers under theories of potential competition and disruptive entrants (DOJ and FTC 2010). In 2018, the FTC challenged a merger between CDK Global and Auto/Mate. The acquiring firm, CDK, was a market leader in specialized business software for franchise automotive dealers. Auto/Mate was a much smaller competitor with an innovative business model that was an emergent threat. Although Auto/Mate was already competing, the FTC was largely concerned about the competition it would likely provide in the future (FTC 2018b; Ohlhausen 2019).

Predicting future competition can be difficult in the digital economy because products and services evolve rapidly. Dominant platforms may acquire start-ups that offer no competing products, but that could compete with them in the future through expansion into adjacent markets. To address this issue, some proposals for revising the antitrust laws would weaken the evidentiary standards when a dominant firm seeks to acquire a firm in a separate but adjacent market. For example, the Agencies might meet their initial burden of proof by showing that there is a reasonable likelihood that the target firm would compete with the acquiring firm in the future, even if the target firm has no specific plans to do so (Shapiro 2019).

Such policies could have important downsides. More aggressive standards for blocking mergers of nascent competitors would raise the likelihood that procompetitive mergers would be blocked. As discussed above, the digital economy relies heavily on innovation. If dominant platforms were routinely deterred from acquiring start-ups, such a policy could reduce venture capital funding in this segment. During the U.K. panel review, a variety of organizations and individuals raised these concerns (Digital Competition Expert Panel 2019a, 2019b). At a minimum, the potential effect of any new policy on venture capital deserves study. More research, including merger retrospectives focused on acquisitions in the digital economy, would also be helpful.

Creation of a digital regulatory authority. The Stigler Committee on Digital Platforms (2019) found that "the strongest indication emerging from the four reports is the importance of having a single powerful regulator capable of overseeing all aspects of [digital platforms]." In terms of competition goals, the digital regulator would have a mandate to design and enforce regulations aimed to enhance competition, such as standards for data portability and interoperability. The authority would be able to designate dominant platforms as "bottlenecks" and subject them to stronger regulations. For example, such platforms might need to obtain approval from the authority for any acquisition, no matter how small, and the digital authority would be able to challenge these acquisitions under a legal standard that imposes a lower burden of proof on the Agencies than does current antitrust law.

The Stigler Committee on Digital Platforms (2019) also makes recommendations that fall outside antitrust and competition policy. A subcommittee on politics, in particular, recommends that a digital authority have the power to take actions to limit concentration, not due to concerns about economic harm to consumers, but due to concerns about the political power of large platforms. A subcommittee on data privacy and security recommends that a digital authority oversee consumer protection regulation that would develop, among other regulations, rules similar to the GDPR in Europe.

Proposals to establish a new digital authority raise a host of issues. A basic concern is that the breadth of the mandate is far from obvious. As noted above, digital platforms provide a wide-ranging set of goods and services, from search engines, to operating systems, to ride-sharing services. The Stigler Committee on Digital Platforms (2019) points to the Federal Communications Commission (FCC) as a model for a digital regulator, but the scope of the FCC's authority is the telecommunications sector. The scope of a digital authority would likely be harder to delineate, and firms in some of the most innovative sectors of the economy would face uncertainty as to whether they fall under its regulations.

Perhaps the most serious concern is for the possibility of regulatory capture. In a speech, FCC chair Ajit Pai (2013) relays a cautionary tale of FCC regulatory capture, describing how AT&T made commitments to the FCC in 1913 that effectively allowed it to divide up territories with independent local telephone companies. These commitments tamed competition that had emerged after the patents of Alexander Graham Bell began to expire. The Stigler Committee on Digital Platforms (2019) discusses the need to deter regulatory capture and cites Pai's speech. It also cites the foundational work on regulatory capture by the Nobel laureate economist George Stigler, for whom the Stigler Center is named. Though there is some irony here, the point is that the downsides of new, far-reaching regulation need to be taken seriously.

Although today's digital economy warrants further study—and, where necessary, vigilant antitrust enforcement—a cautious approach to regulation is clearly warranted. As we have discussed, there is a fundamental problem in inferring that high concentration is indicative of a lack of competition. The nature of competition also varies across markets, so one-size-fits-all policies may not work well. Instead, fact-specific investigations along the lines of what the Agencies already do are more sensible.

Competition Policy to Reduce Entry Barriers

In the preceding sections, we have argued for caution in responding to calls for Federal Government intervention to address increasing concentration in the U.S. economy. However, it is true that entry barriers can protect firms from competition. Sometimes, these entry barriers are structural, in that they are associated with the nature of the market itself, such as products that require large investments in research and development. In other cases, entry barriers

Box 6-4. The Effects of Deregulation within the Pharmaceutical Drug Market

As noted, some barriers to entry are purposefully constructed. To illustrate, consider the pharmaceutical drug industry, where the Food and Drug Administration (FDA) plays a crucial role in supplying drugs through the management of drug application reviews. The FDA ultimately determines if and when a drug will be available on the market. Although the stringent evaluations conducted by the FDA are necessary to ensure the safety and efficacy of drugs, they are also partly responsible for raising entry barriers for many generic and new drugs. This has led to a higher concentration of brand name drugs in some markets, along with higher prices that reduce consumer welfare.

The Trump Administration realizes the significance of improving competition in markets for pharmaceutical drugs, and it has implemented a series of deregulatory reforms with the hope of reducing costs for consumers. One of its proposals highlights the need for the transparency of negotiated discount rates with insurers, requiring hospitals to disclose this information to their patients (CEA 2018a). The Administration also signed the Food and Drug Administration Reauthorization Act in 2017, which reauthorized the FDA to collect user fees from generic drug applications and to process applications efficiently for another five years. Since the start of the Trump Administration, aspects of the FDA's drug application process, most prominently that for generic drugs, have been streamlined to encourage quick market entry. In the first 20 months of the Administration, an average of 17 percent more generic drugs were approved each month than were approved during the previous 20-month period (CEA 2018b).

In 2018, the FDA expanded its Strategic Policy Roadmap in efforts to not only increase efficiencies in the drug review process but also reduce anticompetitive behavior from brand name drug makers that try to inhibit generic market entry. The FDA is also taking steps to address scientific and regulatory barriers that are obstacles to entry of some complex generic medicines. The FDA's efforts to lower barriers and have a more predictable and efficient development process may enable new and innovative drug makers to enter the market. Consumers would benefit both from the development of new classes of drugs and from new therapies for conditions treated by existing drugs. Such new therapies could discipline the prices of existing drugs. This was the case for drugs such as simvastatin, which held a large portion of the market for lowering cholesterol in the 1990s. However, starting in 1996, after the introduction of the therapy drug atorvastatin, competition flourished, and cholesterol-lowering drugs are now affordable (CEA 2018b).

are purposefully constructed by governments in situations where private markets may fail; see box 6-4. However, as discussed in chapter 3 of this Report, even if a regulatory action addresses a private market failure, a deregulatory action is still warranted if the costs of the regulation outweigh the regulatory benefits. This section describes the Agencies' efforts to call attention to regulations that harm consumers by creating entry barriers that limit competition. It also discusses how the Agencies apply the antitrust laws to intellectual property rights to promote sound competition.

Other Government-Created Barriers to Entry

As we discuss in chapter 2 of this *Report*, occupational licensing requirements impose an additional cost on a person entering a given occupation. Some licensing requirements may be justified on public safety grounds; but in many professions, they also function as barriers to entry that artificially inflate wages by protecting those already in the profession from competition. To support the claim that the majority of State occupational licensing requirements are unnecessary to protect public safety, the FTC points out that 1,100 occupations require a license in at least one State but only 60 occupations are licensed by every State. If an occupation poses a substantiated threat to public safety, the argument goes, then that occupation would be universally licensed (FTC 2018a, 2019c).

The Agencies have long advocated measures to limit the competitive harm associated with occupational licensing. In 2017, the FTC established a task force on the issues, and in 2018, it released a report outlining options to mitigate the harm. These options include interstate pacts that allow groups of States to recognize a common license, as well as other portability and mutual recognition measures (FTC 2018a).

Certificate-of-need (CON) laws were originally designed in the 1970s to discourage overinvestment in healthcare markets (e.g., building too many hospitals) in an attempt to limit costs. A CON law requires a firm to convince a State regulator that there is an unmet need for the new services. Over years of review, the Agencies have found that these laws often harm competition, and they regularly advocate for their removal. In 2019, for example, staff at the Agencies sent letters to legislatures in Alaska and Tennessee in support of their plans to revise these laws (DOJ and FTC 2019b, 2019d). The Agencies' analysis of evidence, accumulated over decades, finds that instead of reducing healthcare costs, CON laws tend to create inefficiencies by suppressing healthcare supply to the benefit of established suppliers, preventing investment that would stimulate competition and lower consumer prices.

Many States require car manufacturers to distribute vehicles through independent, franchised dealerships. The Agencies have long advocated against such automobile franchising laws. They argue that when manufacturers are free to choose their method of distribution, the competitive process aligns their interests with those of consumers, so the products and services are brought to market as efficiently as possible. In 2019, Nebraska took up a bill

that would remove restrictions on direct vehicle sales to consumers, but only for vehicle manufacturers that had not used independent, franchised dealers in the State before. The Agencies sent a joint letter to the Nebraska Legislature encouraging it to remove the restrictions for all vehicle manufacturers (DOJ and FTC 2019c).

Promoting Innovation through Sound Enforcement of Competition Law

As we have discussed, consumers often benefit most from dynamic competition, as driven by investment and innovation in new products, inventions, and technologies. Intellectual property rights—such as patents, trademarks, and copyrights—limit competition from infringing products in order to encourage this dynamic competition. However, in certain circumstances, intellectual property rights, like any asset, may be used in a manner that unlawfully limits competition. To prevent this, the Agencies apply the same antitrust principles to conduct involving intellectual property as they do to conduct involving other forms of property (DOJ and FTC 2017). They apply an effects-based economic analysis to conduct involving intellectual property that considers its efficiencies and weighs procompetitive benefits of the conduct against any competitive harm. The Agencies also engage in advocacy for the correct application of antitrust law to intellectual property rights.

The DOJ has emphasized the need to avoid rigid presumptions in the intellectual property area that could deter innovation. In particular, it has cautioned against the misapplication of antitrust laws, which carry the specter of treble damages, to commercial disputes involving the exercise of patent rights. In December 2017, the DOJ withdrew its support from its 2013 joint policy statement with the Patent and Trademark Office on remedies associated with standard essential patents, because the statement had been construed to suggest that the antitrust laws should limit patent holders from seeking injunctions or exclusionary remedies to defend their intellectual property rights. The DOJ's work in this area ensures that there are strong incentives to invest in developing technologies, and thus fostering dynamic competition.

A top priority of the FTC is to oppose "pay-for-delay" patent settlements, whereby branded drug manufacturers pay generic drug producers to stay out of the market. In 2013, in FTC v. Actavis, Inc., the Supreme Court held that, in certain circumstances, the FTC can challenge such settlements under the antitrust law, provided that courts weigh anticompetitive effects against the procompetitive benefits of such conduct. Since that year, the FTC has regularly reported on these settlements. In its most recent report, the FTC found that the number of pay-for-delay payments of the type that are likely to be anticompetitive has been decreasing (FTC 2019a).

Conclusion

The Trump Administration understands the vital role that competition plays in the economy, promoting new businesses and serving consumers. Timely antitrust enforcement is an important tool for protecting the competitive process. By contrast, confusion surrounding the effects of rising concentration appears to be driven by questionable evidence and an overly simple narrative that "Big Is Bad." When companies achieve scale and large market share by innovating and providing their customers with value, this is a welcome result of healthy competition.

This chapter has explained why recent calls for changing the goals of the antitrust laws and expanding the scope of regulations are based on inconclusive evidence that competition is in decline. These calls also ignore the flexibility of the existing legal system to accommodate changing market circumstances. Research purporting to document a pattern of increasing concentration and increasing markups uses data on segments of the economy that are far too broad to offer any insights about competition, either in specific markets or in the economy at large. Where data do accurately identify issues of concentration or supercompetitive profits, additional analysis is needed to distinguish between alternative explanations, rather than equating these market indicators with harmful market power.

Antitrust actions and any major changes to competition policy should be based on sound economic evidence, including evidence on consumer harm. Research based on broad industry studies may be helpful for indicating trends in concentration, but is unable to diagnose the underlying causes or determine whether consumers in relevant antitrust markets have been harmed. Ultimately, today's detailed, evidence-based approach to antitrust remains the most powerful lens available to protect consumers and suppliers by accurately diagnosing and responding to anticompetitive behavior.

For these reasons, this chapter argues that the DOJ's Antitrust Division and the FTC are well-equipped to protect consumers from anticompetitive behavior. The Agencies have maintained their focus on illegal or anticompetitive actions by businesses, while expanding their scope to advocate against government policies that harm competition. Vigorous competition is essential for building upon the economy's record expansion, and the Trump Administration will continue following the economic evidence and using the Federal Government's authority to promote competition in ways that lead to greater consumer benefits.